

**CLAIMS**

1. An FM receiver, comprising:

first detection means for outputting an RSSI  
5 signal indicating intensity of a received radio wave;

first time constant setting means for setting a  
first time constant in the RSSI signal;

second detection means for outputting a detection  
signal corresponding to a high frequency component  
10 included in an IF signal;

second time constant setting means for setting a  
second time constant in the detection signal outputted  
by the second detection means;

arithmetic means for outputting a signal obtained  
15 by subtracting a signal based on the detection signal  
from a signal based on the RSSI signal as a control  
signal; and

control means for controlling at least one of a  
stereo-noise control circuit, a high-cut control  
20 circuit and a muting circuit, according to the control  
signal.

2. A noise eliminator for an FM receiver, comprising:

first detection means for outputting an RSSI  
25 signal indicating intensity of a received radio wave;

first time constant setting means for setting a first time constant in the RSSI signal;

second detection means for outputting a detection signal corresponding to a high frequency component  
5 included in an IF signal;

second time constant setting means for setting a second time constant in the detection signal outputted by the second detection means; and

arithmetic means for outputting a signal obtained  
10 by subtracting a signal based on the detection signal from a signal based on the RSSI signal as a control signal.

3. The FM receiver or the noise eliminator for the FM  
15 receiver according to claims 1 or 2, respectively, wherein

the first time constant is larger than the second time constant.

20 4. The FM receiver or the noise eliminator for the FM receiver according to claims 1 through 3, wherein

the high frequency component is due to multi-path noise.

25 5. A noise elimination method for a FM receiver,

comprising:

subtracting a second detection signal which has size based on intensity of a high frequency component of an IF signal and has a second time constant from a first detection signal which has size proportional to  
5 intensity of an IF signal and has a first time constant, and using a result of the subtraction as a control signal; and

controlling at least one of a stereo-noise control  
10 circuit, a high-cut control circuit and a muting circuit, based on the control signal.

6. The noise elimination method according to claim 5, wherein

15 the high frequency component is due to multi-path noise.